

REMARKS

The issues outstanding in the Office Action mailed November 6, 2003, are the objections under 35 U.S.C §132 and the rejections under 35 U.S.C §112 and 103. Reconsideration of each of these issues, in view of the following discussion, is respectfully requested.

Objections Under 35 U.S.C §132

The prior amendment has been objected to under 35 U.S.C §132 as allegedly introducing new matter into the disclosure. The particular objection concerns the use of the term "linear" to describe the triblock copolymer. As discussed previously, at page 3 of the specification, lines 34-end, clearly would be interpreted by one of ordinary skill in the art as describing a linear triblock copolymer. In particular, the specification indicates that the A, B and C blocks are "linked together in this order" and moreover that "the A block being linked to the B block and the B block to the C block." It is clear that linking of the C block to the A block, which would thus result in a non-linear copolymer, is not contemplated. Accordingly, one of ordinary skill in the art upon reading the present specification would clearly understand that the invention was of a linear triblock copolymer. It is well established that *ipsis verbis* written description is *not* required to satisfy 35 U.S.C §112 and to avoid new matter objections, where one of ordinary skill in the art would clearly understand that a concept is invented by the inventors and taught by the specification. See, for example, *In re Wertheim*, 191 USPQ 90 (CCPA 1976). However, since the term is superfluous, and since the Office Action agrees that the claims are patentable regardless of the linear nature of the triblock copolymer, the superfluous term has been removed from the claims. Withdrawal of this objection is therefore respectfully requested.

Finally, the requested corrections in the Abstract and claims 2, 10 and 18 have been made. The Examiner is thanked for pointing out these typographical errors. Withdrawal of the remainder of the rejection is therefore respectfully requested.

Rejections Under 35 U.S.C §112

Claim 1 has been rejected under 35 U.S.C §112, first paragraph. The use of the term "linear" in the claim is discussed above, and as a result it is submitted that this rejection is moot.

Claims 1, 9, 19 and 20 have been rejected under 35 U.S.C §112, second paragraph. Reconsideration of this rejection is also respectfully requested.

With respect to the term "linear", as above, this portion of the rejection is moot. With respect to the term "semicrystalline" in claim 1, the Office Action admits that the term is one of art, but argues that it is a relative term that only has definite meaning when used in accordance with "criteria that is delineated for a given composition." It is respectfully submitted that there is apparently a misunderstanding of the term, in that it does not have a meaning which can only be defined in a given circumstance, but rather refers to a well known class of polymers. Attention is directed to pages 28-30 of the textbook "Principles of Polymerization", Second Edition, 1981. As discussed in this passage of the textbook, semicrystalline polymers have both a crystalline melting temperature, and a glass transition temperature. The term does not refer, as apparently believed in the Office Action, to the "degree of crystallinity" of the polymer, except to the extent that the possession of both of these phase changes might have such an effect. In any event, it is submitted that the term is clearly definite under the second paragraph of §112, withdrawal of the rejection is appropriate and is respectfully requested.

With respect to claim 9, a minor amendment to the terminology has been made for purposes of antecedent basis. Moreover, the percentages by weight have been clarified so as to address the Examiner's confusion. It is submitted that the claims is clearly definite as it reads.

Finally, the structure has been written out in claims 19 and 20.

Accordingly, it is submitted that the claims fully satisfy the requirements of the statute, and withdrawal of all rejections under 35 U.S.C §112 is respectfully requested.

Rejections Under 35 U.S.C §103

Claims 1, 2, 8-11, 13, 15, 16, 18 and 21-23 have been rejected under 35 U.S.C §103 over Witschard taken with Rober, et al. In addition, claims 3-5 have been rejected under 35 U.S.C §103 over Witschard taken with Rober and Lorek, claims 6 and 7 have been rejected under 35 U.S.C §103 over Witschard taken with Rober and Bayard, claims 12 and 14 have been rejected under 35 U.S.C §103 over Witschard taken with Rober and Tsutsumi, claim 17 has been rejected over Witschard taken with Rober and Drzewski and claims 19 and 20 have been rejected over

Witschard taken with Rober and Lorek. Reconsideration of these rejections is respectfully requested.

Central to all these rejections is the belief, as set forth at page 6 and 7 of the Office Action, that Witschard discloses a linear triblock copolymer within the scope of the present claims. It is evident from the present Office Action that the portion of Witschard relied on is now no longer column 2, disclosing polyvinyl halide impact modifiers such as MBS polymers, but instead the portion of column 2 at line 39+ disclosing block thermoplastic elastomers.

Patentees indicate that the block polymer is "normally incompatible" with the vinyl halide polymer, and disclose at column 9, lines 18-22, that the block polymers can be linear block polymers of two homopolymeric segments, or three ("triblock") polymers. In the portion of the patent bridging columns 7 and 8, Patentees teach that the blocked polymer component may have blocks of a mono-alkenyl-substituted aromatic compound, and (2) a conjugated hydrocarbon alkadiene. Thus, at best, Patentees disclose presently claimed B block, incompatible with fluororesin, and C block, incompatible with fluororesin. The disclosure, completely lacks, however, a disclosure of presently claimed A block, which is compatible with the fluororesin. Presently claimed A block can be, for example, a homopolymer or a copolymer of an alkyl (alkyl) acrylate. See, for example, independent claim 15. Note also claim 16, reciting that A block is a poly(methyl methacrylate), as well as claims 17 and 18 with similar recitations.

In order to allegedly provide a teaching of compatible block A in a triblock copolymer, the Office Action relies upon column 8, lines 32-44 and column 12, lines 32-34 of the patent to allegedly teach methacrylates. However, it is submitted that there is a misunderstanding of both of these portions of patentees' disclosure. At column 8, lines 32-44, patentees teach that the monomer units of the blocked polymers preferably contain alkadiene and mono-alkenyl aromatics, as noted previously. Patentees then indicate that minor "proportions" of residues of other ethylenically unsaturated compounds copolymerizable with the alkadiene and alkenyl substituted aromatic monomer can be present "also as comonomer units," specifically naming "lower alkyl esters of acrylic acid." This disclosure does *not* teach the use of a third block which is a acrylate, but instead teaches that blocks 1 and 2 may contain some acrylates as *comonomers* with the alkenyl-substituted aromatics and/or conjugated hydrocarbonated alkadienes. This

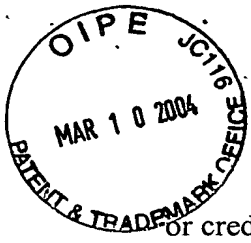
disclosure does *not* teach one of ordinary skill in the art to produce a third block of the triblock from acrylates.

Column 12, lines 30-40 refer to "an organic processing aid contemplated for incorporation into the polyvinyl halide composition of the invention." Note that column 10, lines 6-16 teach that the composition of the invention may contain "various functional additives," such as lubricants, thermal and/or light stabilizers and "processing aides" for the vinyl halide resin.

This portion of the disclosure indicates that the type of such aids is about 0.01 to about 5 weight percent, based on the weight of the total resin composition. It is evident that the reference to "organic processing aid" which again occurs at column 12, and indicates that such processing aids may be polymers or alkyl esters of acrylic acid or methacrylic acid or methylmethacrylate refers to these processing aids and does *not* teach one of ordinary skill in the art to produce one block of a triblock polymer with these materials. Instead, the materials are added to the resin composition in order to improve processing characteristics, rather than as a component block of the block polymer per se. It is submitted that this interpretation is unequivocal upon a careful reading of column 12, lines 30-55.

Thus, the central underpinning of the rejection, that Witschard teaches triblock polymers as recited in claim 1, much less the specific polymers recited in claims 15, etc. is not supported by a careful reading of the references. It is respectfully submitted, therefore, that all of the rejections fail on this basis. Withdrawal thereof is again respectfully requested.

The claims of the application are submitted to be in condition for allowance. However, should the Examiner have any questions or comments, he is cordially invited to telephone the undersigned at the number below.



The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

Harry B. Shubin (Reg. No. 32,004)
Attorney/Agent for Applicant(s)

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza 1, Suite 1400
2200 Clarendon Boulevard
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

FILED: March 8, 2004

HBS/jqs
K:\Atocm\100-199\195\Reply 3-8-04.doc

ABSTRACT

A tube having in its radial direction from the inside to the outside, ~~in~~ an inner layer based on a fluoro-resin (or fluoropolymer) and intended to come into contact with a flowing fluid, formed from a blend comprising a semicrystalline thermoplastic fluoro-resin and an ABC triblock copolymer, the three blocks A, B and C being connected together in this order, the blocks being linked by means of a covalent bond or of an intermediate molecule linked to the blocks via a covalent bond, the A block being compatible with the fluoro-resin, the B block being incompatible with the fluoro-resin and incompatible with the A block, and the C block being incompatible with the ~~with~~ fluoro-resin, the A block and the B block.